

~~CONFIDENTIAL~~

25X1A

COUNTRY -----

SUBJECT Maximum Traffic Conditions/Union Pacific Railroad

DATE

Nm 54

25X1A2a

PLACE ACQUIRED -----
(BY SOURCE) 25X1A

Supplier

DATE ACQUIRED -----
(BY SOURCE)

Responsive to:

DATE (OF INFO) Oct 54

This document contains information affecting the national defense of the United States, within the meaning of Title 18, Sections 793 and 794, of the U.S. Code, as amended. Its transmission or revelation of its contents to or receipt by an unauthorized person is prohibited by law. The reproduction of this report is prohibited.

This UNEVALUATED INFORMATION is supplied for the possible interest of your analysts. It does not warrant dissemination by

25X1A2a

Source or Clarifying Statement:

25X1X6

25X1X6

1. Q. On which lines of railroad has the total number of trains operated equalled the capacity of the line under normal operating conditions for a period of a week or longer? For the purposes of this request, it should be assumed that the capacity of a line has been reached when under normal operating conditions, and with a sufficiency of motive power, freight cars back up in major yards or trains must be routed over alternate lines because as many trains are being operated over the line as can be handled by the line. Give this information for both single and double track lines, and indicate between which major points this condition occurred.

25X1X6

A. While available records do not indicate that density of traffic has been above capacity of any segment of our lines within the meaning and under conditions set forth in the question, a study made of train operation for a period of ten days between Rawlins and Green River, Wyoming, during season of peak freight traffic movement. This is in double track territory and of course its saturation point was not reached. No study was submitted covering single track operation because density of traffic on our line has never been great enough to reach full capacity.

Not only is there considerable seasonal fluctuation in volume of business handled in this territory, but the day-to-day fluctuation is at times great. During the 10-day study here represented, the minimum number of trains handled in any one day was 68, the maximum 84, and the average 75.

2. Q. For one or more of the sections of line where traffic saturation occurred, give the following information on traffic movement during the period of traffic saturation:

- a) What was the total number of days during which this occurred?

- A. 10-day period.

- b) What was the total number of trains moving in each direction during this period?

- A. Westward 365 trains
 - Eastward 385 trains

~~CONFIDENTIAL~~

This report is for the use within the USA of CIA and the intelligence components of State, Army, Navy, Air and FBI. It is not to be transmitted overseas without the concurrence of the originating office through the Assistant Director of the Office of Collection and Dissemination, CIA.

~~CONFIDENTIAL~~

- 2 -

- c) What was the total number of trains of each type (passenger, freight, mixed, military, work, deadhead locomotives, etc) moving in each direction during this period?

A. Type Train	Westward	Eastward	Total
Passenger	118	116	234
Freight	247	263	510
Military	0	5	5
Work	0	1	1
Total	365	385	750

3.9 For the same sections of line, give the following information on the line:

- a) Give the names of stations between which the traffic saturation occurred. What is the mileage? Is it single or double tracked?

A. Rawlins to Green River, Wyoming, covered by this study. Full capacity of line not reached within meaning of questionnaire.
Mileage - 134.2 miles Double track

- b) What is the spacing between sidings (answer this both in terms of distance, and in terms of running time).

A.	Distance between sidings	Avg. Time Passenger Trains	Distance between Stations	Avg. Time-Frt. Trains	
Station				Westbound	Eastbound
Rawlins	0.0 mi.		Rawlins		
Hadsell	7.4	8"			
Riner	9.9	10"			
Cherokee	4.6	5"	41.4 mi.	1'05"	1'27"
Creston	6.7	7"			
Latham	4.0	4"			
Wamsutter	8.2	9"	Wamsutter		
Freven	4.9	5"			
Red Desert	3.6	4"			
Tipton	7.3	8"	32.5 mi.	59"	55"
Robinson	3.4	4"			
Table Rock	3.3	4"			
Magill	5.0	5"			
Bitter Creek	5.0	5"	Bitter Creek		
Black Buttes	9.2	9"			
Hallville	5.3	5"			
Ft. of Rocks	9.9	6"	45.4 mi.	1'04"	1'27"
Salt Wells	11.5	11"			
Baxter	7.1	7"			
Rock Springs	6.4	8"	Rock Springs		
Kanda	6.9	8"	14.9 mi.	35"	30"
Green River	0.0	13"	Green River		

Note: Average time of freight trains given only between open stations (sidings).

- c) What is the total running time (including all stops) between the two ends of the section where traffic saturation occurred? Give this information for trains of various types, including express passenger, local passenger, through freight, local freight.

A. Average total running time between Rawlins and Green River:

Passenger Trains	Freight Trains
2'25"	4'14"

Local trains not involved in this territory.

~~CONFIDENTIAL~~
CONFIDENTIAL

CONFIDENTIAL

~~CONFIDENTIAL~~

- 3 -

- d) What is the average time spent by trains in making meets, from the time the train pulls into the siding to the time it pulls out again? If exact figures are not available, an estimate would be of considerable value. If possible, give average time in making meets for various types of trains.

A. No time consumed in trains making meets, this being double track. Average delay to all freight trains letting passenger trains by - 10 minutes. Many freight trains sustain no delay from this cause. Others receive substantial delay depending on time of day operated.

- e) What is the ruling grade in each direction? What is the length of the ruling grade in each direction?

A. Ruling grade 0.82% in each direction.
Length of ruling grade westbound 15.9 miles, eastbound 12.9 miles.

- f) What was the type of tractive effort and weight in working order of motive power used on each type of train?

A. Type of tractive effort:

Passenger			Freight		
Type	Tractive Effort	Weight	Type	Tractive Effort	Weight
Steam	63,800 lbs.	907,890 lbs.	Steam	97,350 lbs.	1,070,000 lbs.
Diesel	6,500 HP	980,000 lbs.	Steam	135,375 lbs.	1,808,700 lbs.
			Diesel	4,500 HP	687,800 lbs.
			Diesel	5,250 HP	735,000 lbs.
			Gas Turb.		
			Elect.	4,500 HP	555,000 lbs.

- g) What type of signals are used? With these signals, how close can trains follow each other? (Answer this both in terms of distance and in terms of time.)

A. Automatic colorlight block signals. Trains can follow one another a minimum of 5,000 ft. to 12,500 ft.

- h) How are train movements controlled on this line: by signal indication, timetable, train order?

A. Train movements were controlled by signal indication and timetable.

4. Q. Did ~~25X1X6~~ ever make an estimate of the capacity of these sections of line, in terms of trains per day? If so, answer the following questions:

A. No estimate of the capacity of this line has been made.

- and -

CONFIDENTIAL

~~CONFIDENTIAL~~